

ABSTRACT

In a photoelectric conversion device using a semiconductor electrode composed of semiconductor nanoparticles, the semiconductor electrode is made by coating and drying a paste containing a binder and semiconductor nanoparticles dispersed therein on a transparent conductive substrate, and pressing the paste to bond the semiconductor nanoparticles onto the transparent conductive substrate while heating it to a temperature in the range from 30 °C to the softening temperature of the transparent conductive substrate, or, if the semiconductor nanoparticles retain a sensitizing dye, to a temperature in the range from 30 °C to lower one of the softening temperature of the transparent conductive substrate and the deactivation temperature of the sensitizing dye.